=> file biosis medline caplus wpids uspatfull
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

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FILE 'MEDLINE' ENTERED AT 10:30:00 ON 06 JUN 2005

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FILE 'USPATFULL' ENTERED AT 10:30:00 ON 06 JUN 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

*** YOU HAVE NEW MAIL ***

=> s modified nucleotide?

L1 9076 MODIFIED NUCLEOTIDE?

=> s l1 and link? (6a) aminophenol

L2 0 L1 AND LINK? (6A) AMINOPHENOL

=> s l1 and aminophenol

L3 16 L1 AND AMINOPHENOL

=> dup rem 13

PROCESSING COMPLETED FOR L3

L4 16 DUP REM L3 (0 DUPLICATES REMOVED)

=> d 14 bib abs 1-16

L4 ANSWER 1 OF 16 USPATFULL on STN

AN 2005:138619 USPATFULL

TI Heterocyclic compounds and methods of making and using thereof

IN Rao, Yeleswarapu Koteswar, Hyderabad, INDIA

Pal, Manojit, Hyderabad, INDIA

Sharma, Vedula Manohar, Hyderabad, INDIA

Venkateswarlu, Akella, Hyderabad, INDIA

Pillarisetti, Ram, Norcross, GA, UNITED STATES

PI US 2005119269 A1 20050602

AI US 2004-976284 A1 20041028 (10)

PRAI IN 2003-8612003 20031028

US 2004-610163P 20040915 (60)

DT Utility

FS APPLICATION

LREP WOMBLE CARLYLE SANDRIDGE & RICE, PLLC, P.O. BOX 7037, ATLANTA, GA, 30357-0037, US

CLMN Number of Claims: 59

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 13564

Compounds of formula (I), and methods and/or compositions comprising compounds that are effective in modulating inflammatory responses, such as those resulting from AGE and glycated protein accumulation are provided. Methods and/or compositions comprising compounds that are effective in modulating smooth muscle cell proliferation and the diseases or conditions related thereto are also provided. ##STR1##

```
L4
     ANSWER 2 OF 16 USPATFULL on STN
AN -
       2005:131877 USPATFULL
ΤI
       Medical devices employing triazine compounds and compositions thereof
IN
       Timmer, Richard T., Decatur, GA, UNITED STATES
       Alexander, Christopher W., Norcross, GA, UNITED STATES
       Pillarisetti, Sivaram, Norcross, GA, UNITED STATES
       Saxena, Uday, Atlanta, GA, UNITED STATES
       Yeleswarapu, Koteswar Rao, Hyderabad, IN, UNITED STATES
       Pal, Manojit, Hyderabad, INDIA
       Reddy, Jangalgar Tirupathy, Hyderabad, INDIA
       Murali Krishna Reddy, Velagala Venkata Rama, Hyderabad, INDIA
       Sridevi, Bhatlapenumarthy Sesha, Hyderabad, INDIA
       Kumar, Potlapally Rajender, Hyderabad, INDIA
       Reddy, Gaddam Om, Hyderabad, INDIA
PΙ
       US 2005113341
                          A1
                               20050526
ΑI
       US 2004-951305
                          Α1
                               20040927 (10)
RLI
       Division of Ser. No. US 2003-400134, filed on 26 Mar 2003, PENDING
       Continuation-in-part of Ser. No. US 2003-390485, filed on 17 Mar 2003,
       PENDING Continuation of Ser. No. US 2002-253388, filed on 23 Sep 2002,
       ABANDONED
       US 2001-324147P
PRAI
                           20010921 (60)
DT
       Utility
FS
       APPLICATION
LREP
       WOMBLE CARLYLE SANDRIDGE & RICE, PLLC, P.O. BOX 7037, ATLANTA, GA,
       30357-0037, US
CLMN
       Number of Claims: 21
ECL
       Exemplary Claim: 1
DRWN
       86 Drawing Page(s)
LN.CNT 10723
AB
       The present invention relates to methods and compositions comprising
       compounds that treat pathophysiological conditions arising from
       inflammatory responses. In particular, the present invention is directed
       to compounds that inhibit or block glycated protein produced induction
       of the signaling-associated inflammatory response in endothelial cells.
       The present invention relates to compounds that inhibit smooth muscle
       proliferation. In particular, the present invention is directed to
       compounds that inhibit smooth muscle cell proliferation by modulating
       HSPGs such as Perlecan. The present invention further relates to the use
       of compounds to treat vascular occlusive conditions characterized by
       smooth muscle proliferation such as restenosis and atherosclerosis.
L4
     ANSWER 3 OF 16 USPATFULL on STN
ΑN
       2004:335614 USPATFULL
TI
       Stabilized polynucleotides for use in RNA interference
IN
       Leake, Devin, Denver, CO, UNITED STATES
       Reynolds, Angela, Denver, CO, UNITED STATES
       Khvorova, Anastasia, Denver, CO, UNITED STATES
       Marshall, William, Denver, CO, UNITED STATES
PΙ
       US 2004266707
                          A1
                               20041230
ΑI
       US 2003-613077
                          A1
                               20030701 (10)
RLI
       Continuation-in-part of Ser. No. US 2003-406908, filed on 2 Apr 2003,
       PENDING
DT
       Utility
FS
       APPLICATION
LREP
       KALOW & SPRINGUT LLP, 488 MADISON AVENUE, 19TH FLOOR, NEW YORK, NY,
CLMN
       Number of Claims: 88
ECL
       Exemplary Claim: 1
DRWN
       43 Drawing Page(s)
LN.CNT 4224
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AΒ
       Methods and compositions for performing RNA interference comprising a
       wide variety of stabilized polynucleotides suitable for use in
       serum-containing media and for in vivo applications, such as therapeutic
       applications, are provided. These polynucleotides permit effective and
```

efficient applications of RNA interference to applications such as

diagnostics and therapeutics through the use of one or more modifications including orthoesters, terminal conjugates, modified linkages and 2'modified nucleotides.

linkages and 2'modified nucleotides. CAS INDEXING IS AVAILABLE FOR THIS PATENT. ANSWER 4 OF 16 USPATFULL on STN L42004:307045 USPATFULL ANTerminal-phosphate-labeled nucleotides with new linkers ΤI IN Kumar, Shiv, Belle Mead, NJ, UNITED STATES McDougall, Mark, Arroyo Grande, CA, UNITED STATES Sood, Anup, Flemington, NJ, UNITED STATES Nelson, John, Hillsborough, NJ, UNITED STATES Fuller, Carl, Berkeley Heights, NJ, UNITED STATES Macklin, John, Wenonah, NJ, UNITED STATES Mitsis, Paul, Trenton, NJ, UNITED STATES US 2004241716 A1 20041202 PΙ 20040205 (10) ΑI US 2004-772996 A1 US 2003-445189P 20030205 (60) PRAI DT Utility APPLICATION FS Amersham Biosciences Corp, 800 Centennial Avenue, Piscataway, NJ, 08855 LREP CLMN Number of Claims: 66 ECL Exemplary Claim: 1 9 Drawing Page(s) DRWN LN.CNT 2522 CAS INDEXING IS AVAILABLE FOR THIS PATENT. The present invention describes methods of using terminal-phosphate-AB labeled nucleotides in the presence of a manganese salt to enhance their substrate properties towards various enzymes. Particularly described are methods of detecting a nucleic acid in a sample, based on the use of terminal-phosphate-labeled nucleotides as substrates for nucleic acid polymerases, in the presence of a manganese salt. Further provided are manganese complexes of terminal-phosphate-labeled nucleotides as well as terminal-phosphate-labeled nucleotides with new linkers with enhanced substrate properties. CAS INDEXING IS AVAILABLE FOR THIS PATENT. ANSWER 5 OF 16 USPATFULL on STN L42004:286782 USPATFULL AN Methods and compositions of novel triazine compounds TΙ Timmer, Richard T., Decatur, GA, UNITED STATES IN Alexander, Christopher W., Norcross, GA, UNITED STATES Pillarisetti, Sivaram, Norcross, GA, UNITED STATES Saxena, Uday, Atlanta, GA, UNITED STATES Yeleswarapu, Koteswar Rao, Hyderabad, INDIA Pal, Manojit, Hyderabad, INDIA Reddy, Jangalgar Tirupathy, Hyderabad, INDIA Reddy, Velagala Venkira Rama Murali Krishna, Hyderabad, INDIA Sridevi, Bhatlapenumarphy Shesha, Hyderabad, INDIA Kumar, Potlapally Rajender, Hyderabad, INDIA Reddy, Gaddam Om, Hyderabad, INDIA A1 20041111 PΙ US 2004224950 20030326 (10) US 2003-400140 A1 AΤ Continuation-in-part of Ser. No. US 2003-390485, filed on 17 Mar 2003, RLI

PRAI US 2001-324147P 20010921 (60) DTUtility FS APPLICATION JOHN S. PRATT, ESQ, KILPATRICK STOCKTON, LLP, 1100 PEACHTREE STREET, LREP ATLANTA, GA, 30309 Number of Claims: 19 CLMN Exemplary Claim: 1 ECL 86 Drawing Page(s) DRWN LN.CNT 11181 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ABANDONED

PENDING Continuation of Ser. No. US 2002-253388, filed on 23 Sep 2002,

AΒ The present invention relates to methods and compositions comprising compounds that treat pathophysiological conditions arising from inflammatory responses. In particular, the present invention is directed to compounds that inhibit or block glycated protein produced induction of the signaling-associated inflammatory response in endothelial cells. The present invention relates to compounds that inhibit smooth muscle proliferation. In particular, the present invention is directed to compounds that inhibit smooth muscle cell proliferation by modulating HSPGs such as Perlecan. The present invention further relates to the use of compounds to treat vascular occlusive conditions characterized by smooth muscle proliferation such as restenosis and atherosclerosis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4ANSWER 6 OF 16 USPATFULL on STN AN 2004:286243 USPATFULL ΤI siRNA induced systemic gene silencing in mammalian systems IN Leake, Devin, Denver, CO, UNITED STATES Reynolds, Angela, Conifer, CO, UNITED STATES Khvorova, Anastasia, Boulder, CO, UNITED STATES Marshall, William, Boulder, CO, UNITED STATES PA Dharmacon Inc., Lafayette, CO, 80026 (U.S. corporation) PΙ US 2004224405 A1 20041111 US 2003-431027 ΑI **A**1 20030506 (10)

DT Utility FS APPLICATION

KALOW & SPRINGUT LLP, 488 MADISON AVENUE, 19TH FLOOR, NEW YORK, NY, LREP

CLMN Number of Claims: 44 ECL Exemplary Claim: 1 DRWN 17 Drawing Page(s)

LN.CNT 2637

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention is directed to methods and compositions for performing gene silencing in mammalian cells by targeting a region of a non-protein coding target nucleic acid sequence with at least one siRNA molecule comprising a duplex region of between 19 and 30 base pairs.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 7 OF 16 USPATFULL on STN T.4 ΑN 2004:268339 USPATFULL

ΤI Methods and compositions of novel triazine compounds

IN Timmer, Richard T., Decatur, GA, UNITED STATES

Alexander, Christopher W., Norcross, GA, UNITED STATES Pillarisetti, Sivaram, Norcross, GA, UNITED STATES

Saxena, Uday, Atlanta, GA, UNITED STATES Yeleswarapu, Koteswar Rao, Hyderabad, INDIA

Pal, Manojit, Hyderabad, INDIA

Reddy, Jangalgar Tirupathy, Hyderabad, INDIA

Krishma Reddy, Velagala Venkata Rama Murali, Hyderabad, INDIA

Sesila Sridevi, Bhatlapenumarthy, Hyderabad, INDIA

Kumar, Potlapally Rajender, Hyderabad, INDIA

Reddy, Gaddam Om, Hyderabad, INDIA

PΙ US 2004209882 A1 20041021

AΙ US 2003-400169 A1 20030326 (10)

DT Utility

FS APPLICATION

LREP WOMBLE CARLYLE SANDRIDGE & RICE, PLLC, P.O. BOX 7037, ATLANTA, GA,

30357-0037

CLMN Number of Claims: 19

ECL Exemplary Claim: 1

DRWN 86 Drawing Page(s)

LN.CNT 12036

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AΒ The present invention relates to methods and compositions comprising compounds that treat pathophysiological conditions arising from inflammatory responses. In particular, the present invention is directed

to compounds that inhibit or block glycated protein produced induction of the signaling-associated inflammatory response in endothelial cells. The present invention relates to compounds that inhibit smooth muscle proliferation. In particular, the present invention is directed to compounds that inhibit smooth muscle cell proliferation by modulating HSPGs such as Perlecan. The present invention further relates to the use of compounds to treat vascular occlusive conditions characterized by smooth muscle proliferation such as restenosis and atherosclerosis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
ANSWER 8 OF 16 USPATFULL on STN
T.4
       2004:268338 USPATFULL
AN
       Methods and compositions of novel triazine compounds
ΤI
       Timmer, Richard T., Decatur, GA, UNITED STATES
IN
       Alexander, Christopher W., Norcross, GA, UNITED STATES
       Pillarisetti, Sivaram, Norcross, GA, UNITED STATES
       Saxena, Uday, Atlanta, GA, UNITED STATES
       Yeleswarapu, Koteswar Rao, Hydrabad, INDIA
       Pal, Manojit, Hydrabad, INDIA
       Reddy, Jangalgar Tirupathy, Hydrabad, INDIA
       Krishna Reddy, Velagala Venkata Rama Murali, Hydrabad, INDIA
       Sridevi, Bhatlapenumarthy Sesha, Hydrabad, INDIA
       Kumar, Potlapally Rajender, Hyderbad, INDIA
       Reddy, Gaddam Om, Hydrabad, INDIA
PΙ
       US 2004209881
                         A1
                               20041021
ΑI
       US 2003-400134
                         A1
                               20030326 (10)
       Utility
DT
FS
       APPLICATION
LREP
       JOHN S. PRATT, ESQ, KILPATRICK STOCKTON, LLP, 1100 PEACHTREE STREET,
       ATLANTA, GA, 30309
CLMN
       Number of Claims: 19
ECL
       Exemplary Claim: 1
DRWN
       86 Drawing Page(s)
LN.CNT 9019
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention relates to methods and compositions comprising
AB
```

compounds that treat pathophysiological conditions arising from inflammatory responses. In particular, the present invention is directed to compounds that inhibit or block glycated protein produced induction of the signaling-associated inflammatory response in endothelial cells. The present invention relates to compounds that inhibit smooth muscle proliferation. In particular, the present invention is directed to compounds that inhibit smooth muscle cell proliferation by modulating HSPGs such as Perlecan. The present invention further relates to the use of compounds to treat vascular occlusive conditions characterized by smooth muscle proliferation such as restenosis and atherosclerosis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

FS

APPLICATION

```
ANSWER 9 OF 16 USPATFULL on STN
L4
AN
       2004:268337 USPATFULL
ΤI
       Methods and compositions of novel triazine compounds
       Timmer, Richard T., Decatur, GA, UNITED STATES
IN
       Alexander, Christopher W., Norcross, GA, UNITED STATES
       Pillarisetti, Sivaram, Norcross, GA, UNITED STATES
       Saxena, Uday, Atlanta, GA, UNITED STATES
       Yeleswarapu, Koteswar Rao, Begumpet, INDIA
       Pal, Manojit, Miyapur, INDIA
       Reddy, Jangalgar Tirupathy, Miyapur, INDIA
       Krlshna Reddy, Velagala Venkata Rama Murali, Kukatpally, INDIA
       Sridevi, Bhatlapenumarthy Sesha, Gandhinagar, INDIA
       Kumar, Potlapally Rajender, Miyapur, INDIA
       Reddy, Gaddam Om, Miyapur, INDIA
       US 2004209880
PΙ
                         A1
                               20041021
AΙ
       US 2003-397968
                         A1
                               20030326 (10)
DT
      Utility
```

LREP WOMBLE CARLYLE SANDRIDGE & RICE, PLLC, P.O. BOX 7037, ATLANTA, GA, 3,0357-0037

CLMN Number of Claims: 19 ECL Exemplary Claim: 1 DRWN 86 Drawing Page(s)

LN.CNT 10190

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to methods and compositions comprising compounds that treat pathophysiological conditions arising from inflammatory responses. In particular, the present invention is directed to compounds that inhibit or block glycated protein produced induction of the signaling-associated inflammatory response in endothelial cells. The present invention relates to compounds that inhibit smooth muscle proliferation. In particular, the present invention is directed to compounds that inhibit smooth muscle cell proliferation by modulating HSPGs such as Perlecan. The present invention further relates to the use of compounds to treat vascular occlusive conditions characterized by smooth muscle proliferation such as restenosis and atherosclerosis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 10 OF 16 USPATFULL on STN

AN 2004:255110 USPATFULL

TI Stabilized polynucleotides for use in RNA interference

IN Leake, Devin, Denver, CO, UNITED STATES
Reynolds, Angela, Conifer, CO, UNITED STATES
Khvorova, Anastasia, Boulder, CO, UNITED STATES
Marshall, William, Boulder, CO, UNITED STATES
Scaringe, Stephen, Lafayette, CO, UNITED STATES

PA Dharmacon, Inc., Lafayette, CO, UNITED STATES, 80026 (U.S. corporation)

PI US 2004198640 A1 20041007

AI US 2003-406908 A1 20030402 (10)

DT Utility FS APPLICATION

LREP KALOW & SPRINGUT LLP, 488 MADISON AVENUE, 19TH FLOOR, NEW YORK, NY,

CLMN Number of Claims: 69 ECL Exemplary Claim: 1 DRWN 25 Drawing Page(s)

LN.CNT 2440

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods and compositions for performing RNA interference comprising a wide variety of stabilized polynucleotides suitable for use in serum-containing media and for in vivo applications, such as therapeutic applications, are provided. These polynucleotides permit effective and efficient applications of RNA interference to applications such as diagnostics and therapeutics through the use of one or more modifications including orthoesters, terminal conjugates, modified linkages and 2'modified nucleotides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 11 OF 16 USPATFULL on STN

AN 2004:101778 USPATFULL

TI Methods and compositions of novel triazine compounds

IN Timmer, Richard T., Decatur, GA, UNITED STATES
Alexander, Christopher W., Norcross, GA, UNITED STATES
Pillarisetti, Sivaram, Norcross, GA, UNITED STATES
Saxena, Uday, Atlanta, GA, UNITED STATES

Campbell, Karen A., Durham, NC, UNITED STATES US 2004077648 Al 20040422

AI US 2003-390485 A1 20030317 (10)

RLI Continuation of Ser. No. US 2002-253388, filed on 23 Sep 2002, ABANDONED

PRAI US 2001-324147P 20010921 (60)

DT Utility

PΙ

FS APPLICATION

LREP JOHN S. PRATT, ESQ, KILPATRICK STOCKTON, LLP, 1100 PEACHTREE STREET, SUITE 2800, ATLANTA, GA, 30309

CLMN Number of Claims: 75 ECL Exemplary Claim: 1 DRWN 54 Drawing Page(s)

LN.CNT 10058

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to methods and compositions comprising compounds that treat pathophysiological conditions arising from inflammatory responses. In particular, the present invention is directed to compounds that inhibit or block glycated protein produced induction of the signaling-associated inflammatory response in endothelial cells. The present invention relates to compounds that inhibit smooth muscle proliferation. In particular, the present invention is directed to compounds that inhibit smooth muscle cell proliferation by modulating HSPGs such as Perlecan. The present invention further relates to the use of compounds to treat vascular occlusive conditions characterized by smooth muscle proliferation such as restenosis and atherosclerosis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

T.4 ANSWER 12 OF 16 USPATFULL on STN AN 2004:64489 USPATFULL ΤI Templated molecules and methods for using such molecules IN Pedersen, Henrik, Bagsvaerd, DENMARK Gouilaev, Alex Haahr, Vesko Sjaelland, DENMARK Franch, Thomas, Odense C, DENMARK Sams, Christian Klarner, Frederiksberg C, DENMARK Olsen, Eva Kampmann, Herlev, DENMARK Slok, Frank Abilgaard, Kobenhavn N, DENMARK Husemoen, Gitte Nystrup, Kobenhavn N, DENMARK Felding, Jakob, Charlottenlund, DENMARK Hyldtoft, Lene, Virum, DENMARK Norregaard-Madsen, Mads, Birkerod, DENMARK Godskesen, Michael Anders, Vedbaek, DENMARK Glad, Sanne Schroder, Ballerup, DENMARK Thisted, Thomas, Frederikssund, DENMARK Freskgard, Per-Ola, Vellinge, SWEDEN Holtmann, Anette, Ballerup, DENMARK Nuevolution A/S, Copenhagen, DENMARK (non-U.S. corporation) PΑ PΙ US 2004049008 A1 20040311 US 2002-175539 20020620 (10) ΑI A1 PRAI DK 2001-962 20010620 US 2001-299443P 20010621 (60) US 2002-364056P 20020315 (60) DTUtility FS APPLICATION LREP BROWDY AND NEIMARK, P.L.L.C., 624 NINTH STREET, NW, SUITE 300, WASHINGTON, DC, 20001-5303 CLMN Number of Claims: 316 ECL Exemplary Claim: 1 DRWN 100 Drawing Page(s) LN.CNT 11215 CAS INDEXING IS AVAILABLE FOR THIS PATENT. AR The present invention relates to a method for synthesising templated molecules. In one aspect of the invention, the templated molecules are

therapeutic activity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
L4 ANSWER 13 OF 16 USPATFULL on STN
```

AN 2003:194996 USPATFULL

TI Enzymatic nucleic acid synthesis: compositions and methods for altering monomer incorporation fidelity

allows the generation of libraries which can be screened for e.g.

linked to the template which templated the synthesis thereof. The intion

IN Hardin, Susan H., Bellaire, TX, UNITED STATES
Gao, Xiaolian, Houston, TX, UNITED STATES
Briggs, James, Katy, TX, UNITED STATES
Willson, Richard, Houston, TX, UNITED STATES

```
Tu, Shiao-Chun, Houston, TX, UNITED STATES
PΙ
       US 2003134807
                        A1
                                20030717
AΙ٠
       US 2001-7621
                           Α1
                                20011203 (10)
       US 2000-250764P
PRAI
                           20001201 (60)
DT
       Utility
FS
       APPLICATION
       ROBERT W STROZIER, PLLC, 2925 BRIARPARK, SUITE 930, HOUSTON, TX, 77042
LREP
CLMN
       Number of Claims: 20
ECL
       Exemplary Claim: 1
DRWN
       14 Drawing Page(s)
LN.CNT 3557
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Nucleotide triphosphate probes containing a molecular and/or atomic tag
       on a a \gamma and/or \beta phosphate group and/or a base moiety having
       a detectable property are disclosed, and kits and method for using the
       tagged nucleotides in sequencing reactions and various assay. Also,
       phosphate and polyphosphate molecular fidelity altering agents are
       disclosed.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 14 OF 16 USPATFULL on STN
T.4
AN
       2002:129802 USPATFULL
ТT
       Xanthene dyes and their application as luminescence quenching compounds
       Haugland, Richard P., Eugene, OR, United States
TN
       Singer, Victoria L., Eugene, OR, United States Yue, Stephen T., Eugene, OR, United States
PA
       Molecular Probes, Inc., Eugene, OR, United States (U.S. corporation)
PΙ
       US 6399392
                           В1
                                20020604
                                20000421 (9)
ΑI
       US 2000-556464
PRAI
       US 1999-130808P
                           19990423 (60)
       Utility
DT
FS
       GRANTED
       Primary Examiner: Ceperley, Mary E.
EXNAM
       Helfenstein, Allegra, Skaugset, Anton, Stracker, Elaine
LREP
CLMN
       Number of Claims: 44
ECL
       Exemplary Claim: 1
DRWN
       1 Drawing Figure(s); 1 Drawing Page(s)
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The quenching compounds of the invention are nitrogen-substituted
AB
       xanthenes that are substituted by one or more aromatic or heteroaromatic
       quenching moieties. The quenching compounds of the invention exhibit
       little or no observable fluorescence and efficiently quench a broad
       spectrum of luminescent compounds. The chemically reactive quenching
       compounds possess utility for labeling a wide variety of substances,
       including biomolecules. These labeled substances are highly useful for a
       variety of energy-transfer assays and applications.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 15 OF 16 USPATFULL on STN
L4
AN
       2002:129750 USPATFULL
ΤI
       γ-phosphoester nucleoside triphosphates
IN
       Kao, C. Cheng, Bloomington, IN, United States
       Widlanski, Theodore, Bloomington, IN, United States
       Vassiliou, William, Bloomington, IN, United States
       Epp, Jeffrey, Indianapolis, IN, United States
       Advanced Research and Technology Institute, Inc., Indianapolis, IN,
PA
       United States (U.S. corporation)
PΙ
       US 6399335
                          B1
                                20020604
ΑI
       US 1999-441108
                                19991116 (9)
DT
       Utility
FS
       GRANTED
EXNAM
       Primary Examiner: Riley, Jezia
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LREP

CLMN

ECL

Osman, Richard Aron

Exemplary Claim: 1

Number of Claims: 23

DRWN 0 Drawing Figure(s); 0 Drawing Page(s) LN.CNT 785 CAS INDEXING IS AVAILABLE FOR THIS PATENT. The invention provides methods and compositions for polymerizing a particular nucleotide with a polymerase. In general, the method involves (a) forming a mixture of a polymerase and a nucleoside triphosphate (NTP) comprising $\alpha,\ \beta$ and γ phosphates and a γ-phosphate phosphoester-linked functional group; and incubating the mixture under conditions wherein the polymerase catalyzes cleavage of the NTP between the α and β phosphates, liberating a pyrophosphate comprising the functional group and polymerizing the resultant nucleoside monophosphate, i.e. incorporates the nucleoside monophosphate in a nascent polynucleotide. A variety of functional groups compatible with the polymerization reaction are provided. CAS INDEXING IS AVAILABLE FOR THIS PATENT. L4ANSWER 16 OF 16 USPATFULL on STN AN . 96:87702 USPATFULL Unsymmetrical complexing agents and targeting immunoreagents useful in TI thearpeutic and diagnostic compositions and methods

IN Delecki, Daniel J., Upper Merion Township, Montgomery County, PA, United Saha, Ashis K., Frazer, PA, United States Snow, Robert A., West Chester, PA, United States Sterling Winthrop Inc., New York, NY, United States (U.S. corporation) PΑ US 5559214 PΙ 19960924 US 1993-69242 ΑI 19930528 (8) DTUtility FS Granted EXNAM Primary Examiner: Wu, Shean C.; Assistant Examiner: Chapman, Lara E. LREP Fish & Richardson PC CLMN Number of Claims: 18 ECL Exemplary Claim: 1 DRWN No Drawings LN.CNT 3248 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
L8
     2002:793841 CAPLUS
AN
     137:307013
DN
    Non-enzymatic liposome-linked closely spaced array electrodes assay
ΤI
     (NEL-ELA) for detecting and quantifying nucleic acids
IN
     Bredehorst, Reinhard; Hintsche, Rainer; Heuberger, Anton
PΑ
     Fraunhofer-Gesellschaft zur Foerderung der Angewandten Forschung e.V.,
     Germany
     PCT Int. Appl., 124 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     English
LΑ
FAN.CNT 1
    PATENT NO.
                       KIND DATE
                                           APPLICATION NO.
     _____
                        ----
    WO 2002081739
                       A2
                               20021017
                                           WO 2002-EP3892
                                                                  20020408
                        A3 20040129
     WO 2002081739
        W: JP, US
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, TR
     EP 1409728
                                        EP 2002-735236
                         A2
                               20040421
                                                                  20020408
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI, CY, TR
PRAI US 2001-282164P
                         P
                               20010409
     WO 2002-EP3892
                         W
                               20020408
AB
     The invention concerns target nucleic acids or amplicons thereof bound to
     immobilized capture oligonucleotides by mol. biol. reactions, are detected
     and quantified with affinity liposomes containing encapsulated electrochem.
     detectable reporter mols. susceptible to redox recycling and
     surface-attached affinity components capable of specifically binding to
     captured target nucleic acids or amplicons thereof in a structure
     restricted manner. Specifically bound affinity liposomes are lysed by
     temperature- or detergent-mediated mechanisms and released reporter mols. are
     quantitated via redox recycling using voltammetry in conjunction with a
     closely spaced array of thin film nobel metal electrodes. The quantity of
     released reporter mols. is a proportional measure of the quantity of
     target nucleic acids in the sample. For amplified assay procedures
    polymeric carrier mols. capable of binding multiple affinity liposomes or
    preformed complexes of affinity liposomes are utilized.
    ANSWER 2 OF 3 USPATFULL on STN
L8
      88:50246 USPATFULL
AN
ΤI
      Compositions and methods for functionalizing nucleic acids
IN
      Snitman, David L., Boulder, CO, United States
PΑ
      Amgen Inc., Thousand Oaks, CA, United States (U.S. corporation)
ΡI
      US 4762779
                              19880809
ΑI
      US 1985-744508
                              19850613 (6)
DT
      Utility
FS
      Granted
EXNAM Primary Examiner: Marantz, Sidney; Assistant Examiner: Spiegel, Jack
LREP
      O'Toole, Marshall
CLMN
      Number of Claims: 4
ECL
      Exemplary Claim: 4
DRWN
      No Drawings
LN.CNT 411
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AΒ
      A composition and a method for 5'-labelling polynucleotides undergoing
      solid phase synthesis wherein a phosphoramidite of an .
      o-hydroxylamine is condensed to a support-bound polynucleotide.
```

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
L8 ANSWER 3 OF 3 USPATFULL on STN AN 88:24488 USPATFULL
```

TI Method for derivitization of polynucleotides

IN Stabinsky, Yitzhak, Boulder, CO, United States
PA Amgen, Thousand Oaks, CA, United States (U.S. corporation)
PI US 4739044 19880419

AI US 1985-744798 DT Utility

798 19850613 (6)

DT Utility FS Granted

EXNAM Primary Examiner: Brown, J. R.; Assistant Examiner: Rollins, John W.

LREP Marshall, O'Toole, Gerstein, Murray & Bicknell

CLMN Number of Claims: 5 ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 421

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for the preparation of a 3' end functionalized polynucleotide is disclosed. An amine-functionalized solid phase support is treated sequentially with an anhydride, then with an ω-hydroxylamine. A polynucleotide is chemically synthesized on the treated support and is subsequently cleaved therefrom by hydrolysis of the amide bonds. A polynucleotide having a 3' free primary amine is recovered for use in hybridization assays and other uses.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
> d 110 bib abs 1-4
    ANSWER 1 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
L10
    2003:454920 CAPLUS
AN
     139:32899
DN
    Electrochemical method for detecting water-borne pathogens
TI
    Fritsch, Ingrid; Beitle, Robert; Aguilar, Zoraida
IN
PΑ
    U.S. Pat. Appl. Publ., 22 pp., Cont.-in-part of U.S. Ser. No. 978,734.
SO
    CODEN: USXXCO
DT
    Patent
    English
LΑ
FAN.CNT 3
                       KIND
                               DATE
    PATENT NO.
                                           APPLICATION NO.
                                                                  DATE
                        ____
                       A1
    US 2003108922
                               20030612
                                          US 2002-252342
                                                                  20020923
    US 2002058279
                        A1
                              20020516
                                           US 2001-978734
                                                                20011015
    US 6887714
                        B2
                             20050503
PRAI US 2000-240691P
                        P
                               20001016
                      A2
    US 2001-978734
                              20011015
    A novel, surface immobilization electrochem. assay allows for rapid,
AΒ
     accurate and highly sensitive detection of microorganisms and biol. mols.
     Known surface immobilization methods are utilized to bind an analyte to a
     surface. A binding material with a covalently attached electroactive
     complex generates elec. current in the presence of analyte. An electrode
     is used to detect the current, that is directly related to the concentration of
     analyte. The invention is especially suitable for detection of Cryptosporidium
    parvum. A sandwich-type immunoassay was performed in which a monoclonal
     IgM antibody to C. parvum was covalently attached via carboduimide
     coupling to 11-mercapto-1-undecanol and 11-mercapto-1-undecanoic acid
     self-assembled monolayers on gold macrochips, followed by capture of C.
    parvum oocysts from the sample solution, and attachment of a secondary
     antibody, labeled with alkaline phosphatase (AP). Bare gold macroelectrode
     and a microelectrode were used to detect p-aminophenol enzymically
     generated by the AP immobilized on the modified chip from a solution of 4 mM
    p-aminophenyl phosphate in 0.1 M Tris buffer (pH = 9). The detection
     limit for the microelectrode detection was 7 oocysts/L.
   ANSWER 2 OF 4 USPATFULL on STN
L10
       2002:254481 USPATFULL
AN
ΤI
       Dye intermediate and method
IN
      Griffiths, John, Leeds, UNITED KINGDOM
      Mama, John, Leeds, UNITED KINGDOM
      Millar, Valerie, Mid Glamorgan, UNITED KINGDOM
      Briggs, Mark, Cardiff, UNITED KINGDOM
      Hamilton, Alan, Amersham, UNITED KINGDOM
PΑ
      Nycomed Amersham plc, Amersham, UNITED KINGDOM (non-U.S. corporation)
PΤ
      US 6458966
                        B1
                              20021001
      WO 9907793 19990218
ΑI
      US 2000-485177
                              20000424 (9)
      WO 1998-GB2334
                              19980804
                              20000424 PCT 371 date
PRAI
      GB 1997-16476 19970804
DΤ
      Utility
FS
      GRANTED
EXNAM
      Primary Examiner: Ceperley, Mary E.
LREP
      Romming, Jr., Royal N., Ryan, Stephen G.
CLMN
      Number of Claims: 5
ECL
      Exemplary Claim: 1
DRWN
       0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 943
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
      Various classes of dyes are provided having acid, ester or amide groups
```

where R.sup.1 comprises a linker and a carboxy including acid, salt, ester including N-hydroxysuccinimide, activated ester or amide group;

a compound of formula (I) ##STR1##

for covalent linking to biomolecules. The dyes may be prepared by use of

R.sup.2, R.sup.3, R.sup.4 and R.sup.5 are H, C.sub.1-C.sub.10 alkyl or aralkyl or a group to modify solubility or electronic or spectral properties or a functional linking group: or R.sup.4-R.sup.5 and/or R.sup.2-R.sup.4 and/or R.sup.2-R.sup.3 are linked to form an extended ring system; and R.sup.6 is H or CHO or NO.

CAS INDEXING IS AVAILABLE FOR THIS PATENT. .

```
L10 ANSWER 3 OF 4 USPATFULL on STN
AN
       1999:167042 USPATFULL
ΤI
      Nitrogen mustard prodrugs with novel lipophilic protecting groups, and
      processes for their production
       Springer, Caroline Joy, Sutton, United Kingdom
TN
      Niculescu-Duvaz, Ion, Sutton, United Kingdom
       Cancer Research Campaign Technology Limited, London, United Kingdom
PA
       (non-U.S. corporation)
       US 6005002
PΙ
                               19991221
      WO 9622277 19960725
ΑI
      US 1997-875099
                               19970716 (8)
      WO 1996-GB112
                               19960119
                               19970716 PCT 371 date
                               19970716 PCT 102(e) date
PRAT
      GB 1995-1052
                           19950119
DТ
      Utility
FS
      Granted
EXNAM
      Primary Examiner: Geist, Gary; Assistant Examiner: Davis, Brian J.
```

LREP Venable
CLMN Number of Claims: 10
ECL Exemplary Claim: 1

DRWN 3 Drawing Figure(s); 3 Drawing Page(s)

LN.CNT 1249

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The invention provides compounds of formula (I) and (II) wherein X and Y are independently chlorine, bromine, iodine, a mesyl group CH.sub.3 SO.sub.3 or a tosyl group OSO.sub.2 phenyl (wherein phenyl is optionally substituted by 1, 2, 3, 4 or 5 substituents independently selected from C.sub.1-4 alkyl, halogen, cyano or nitro; R.sup.1 and R.sup.2 are independently 1 to 4 optional substituents; Z.sup.1 and Z.sup.2 are each independently --O-- or --NH--; R.sup.3 is hydrogen, t-butyl or allyl; Z.sup.3 is a hydrocarbyl group such as carboxyethyl, optionally containing heteroatoms, and physiologically acceptable derivatives thereof. The compounds can be converted in situ into nitrogen mustard agents by the actions of enzymes such as carboxypeptidase or nitroreductase and are useful for the treatment of cancer. ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
L10 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
```

AN 1995:759132 CAPLUS

DN 124:146760

TI Oligonucleotide analogs containing unsaturated 3',5' and 2',5' allyl ether and allyl sulfide linkages capable of hybridizing to target nucleic acid sequences

IN Matteucci, Mark D.; Cao, Xiaodong

PA Gilead Sciences, Inc., USA

SO U.S., 77 pp. Cont.-in-part of U.S. Ser. No. 892,902.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 3

1111	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PΙ	US 5434257	Α	19950718	US 1993-142785	19931026
	US 5817781	Α	19981006	US 1992-892902	19920601
	AT 174599	E	19990115	AT 1993-915177	19930601
	WO 9511911	A1	19950504	WO 1994-US12202	19941025
	W: CA, JP, US	5			

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

	US 6410702	В1	20020625	US 1998-165883	19981002
	US.2003120050	A1	20030626	US 2002-176763	20020621
-	US 6683166	B2	20040127		•
PRAI	US 1992-892902	A2	19920601		
	US 1993-142785	Α	19931026		
	US 1998-165883	A1	19981002		
os	MARPAT 124:146760				
CT					

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Oligonucleotide analogs I and II where X is S, O, CH2, CHF or CF2; X1 is AB O or S; R1 is independently H, an oligomer or a blocking group including PO3-2, O-dimethoxytrityl (DMTO), O-monomethoxytrityl (MMTO), H-phosphonate (OPO2H), methylphosphonate (OPO3CH3), methylphosphonamidite, or a phosphoramidite such as β -cyanoethylphosphoramidite; R2 independently is O-alkyl (C1-C12 including O-Me, O-Et, O-Pr, O-Bu and their isomers), S-alkyl(C1-C12), H, OH, OCH3, SCH3, OCH2CH: CH2 (O-allyl), OC3H7 (O-propyl), SCH2CHCH2, or a halogen (F, Cl, Br or I); B is independently a base, and n is 0-100, preferably 0-28; both R1 taken together can comprise a circular oligomer and may be covalently linked, for example, at a terminal 5' position with a terminal 2' or 3' position, are disclosed. The substitute linkage replace the usual phosphodiester linkage found in unmodified nucleic acids. The oligonucleotide analogs are easy to synthesize, stable in vivo, resistant to endogenous nucleases and are able to hybridize to target nucleic acid sequences in a sequence specific manner. Thus, e.g., 3'-H-phosphonate dimers III (X = O, S, preparation given) were incorporated into oligomers (5' TCT CTC TCT CT#T T#TT 3'; # = X-containing linkage) and tested for binding to single stranded DNA (3' AGA GAG AGA GAA AAA 5'): Δ Tm was -3.25 and -3.0°, resp., for X = O and X = S.

=> d his

(FILE 'HOME' ENTERED AT 10:29:18 ON 06 JUN 2005)

FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 10:30:00 ON 06 JUN 2005

9076	S MODIFIED NUCLEOTIDE?			
0	S L1 AND LINK? (6A) AMINOPHENOL			
16	S L1 AND AMINOPHENOL			
16	DUP REM L3 (0 DUPLICATES REMOVED)			
164	S LINK? (15A) AMINOPHENOL			
7	S L5 AND NUCLEOTIDE?			
3	S L6 AND LINK? (15A) NUCLEOTIDE?			
3	DUP REM L7 (0 DUPLICATES REMOVED)			
	0 16 16 164 7 3			

L9 4 S L6 NOT L8
L10 4 DUP REM L9 (0 DUPLICATES REMOVED)

(FILE 'HOME' ENTERED AT 10:29:18 ON 06 JUN 2005)

FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 10:30:00 ON 06 JUN 2005 9076 S MODIFIED NUCLEOTIDE? L1L2 0 S L1 AND LINK? (6A) AMINOPHENOL 16 S L1 AND AMINOPHENOL L316 DUP REM L3 (0 DUPLICATES REMOVED) L4L5 164 S LINK? (15A) AMINOPHENOL 7 S L5 AND NUCLEOTIDE? L6 L7 3 S L6 AND LINK? (15A) NUCLEOTIDE? L8 3 DUP REM L7 (0 DUPLICATES REMOVED) L9 4 S L6 NOT L8 L10 4 DUP REM L9 (0 DUPLICATES REMOVED) => s 15 and fluorophore 1 L5 AND FLUOROPHORE L11=> d l11 bib abs L11 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN 2001:222390 CAPLUS ΑN 135:58012 DN TIDensity functional study of fluorescent indicators for the intracellular determination of Ca2+ and Mq2+ ΑU Delabie, Annelies; Cielen, Els; Boens, Noel; Pierloot, Kristine Department of Chemistry, Quantum Chemistry Group, University of Leuven, CS Heverlee-Leuven, B-3001, Belg. Journal of the Chemical Society, Perkin Transactions 2 (2001), (4), SO 468-475 CODEN: JCSPGI; ISSN: 1472-779X PB Royal Society of Chemistry DΤ Journal LΑ English AΒ Fluorescent indicators for the intracellular determination of Ca2+ and Mq2+ have been studied by means of theor. calcns., based on D. Functional Theory (DFT). The indicators consist of the podant o-aminophenol -N,N,O-triacetic acid (APTRA), linked to an arylthiophene fluorophore, substituted in the para position with donor or acceptor groups. The interaction of Ca2+ and Mg2+ with the indicators was studied both in the gas phase and in solvent. In the gas phase, these cations both have a five-fold coordination. Binding with the cation results in a change in the hybridization state of the nitrogen from sp2 to sp3; the nitrogen lone pair is no longer part of the conjugated system. The metal-nitrogen interaction is given up in solvent; the structure relaxes so that the nitrogen lone pair can again participate in the conjugated system of the fluorophore. The effect of the electron-withdrawing or -donating substituents on the cation-indicator interaction was investigated. Two effects determine the nature of the complexation in solvent. Firstly, there is the inherent binding energy of the indicator with the metal, which is favored by electron-donating substituents and weakened by electron-withdrawing groups. Secondly, there is a stabilizing effect of the solvent on the free indicators; due to their smaller dipole moment, free indicators with electron-withdrawing groups are stabilized less by the solvent. For various substituents, these two effects evolve in opposite ways. This results in a small overall variation of complexation energies. RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
=> s modified nucleotide?
          9081 MODIFIED NUCLEOTIDE?
=> s l1 and aminonaphthol
             2 L1 AND AMINONAPHTHOL
=> d 12 bib abs 1-2
     ANSWER 1 OF 2 USPATFULL on STN
L_2
       2003:194996 USPATFULL
ΑN
TI
       Enzymatic nucleic acid synthesis: compositions and methods for altering
       monomer incorporation fidelity
       Hardin, Susan H., Bellaire, TX, UNITED STATES
IN
       Gao, Xiaolian, Houston, TX, UNITED STATES
       Briggs, James, Katy, TX, UNITED STATES
       Willson, Richard, Houston, TX, UNITED STATES
       Tu, Shiao-Chun, Houston, TX, UNITED STATES
PΙ
       US 2003134807
                         A1
                             20030717
                         A1
ΑT
       US 2001-7621
                               20011203 (10)
       US 2000-250764P 20001201 (60)
PRAI
DT
       Utility
FS
       APPLICATION
       ROBERT W STROZIER, PLLC, 2925 BRIARPARK, SUITE 930, HOUSTON, TX, 77042
LREP
CLMN
       Number of Claims: 20
ECL
       Exemplary Claim: 1
DRWN
       14 Drawing Page(s)
LN.CNT 3557
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Nucleotide triphosphate probes containing a molecular and/or atomic tag
       on a a \gamma and/or \beta phosphate group and/or a base moiety having
       a detectable property are disclosed, and kits and method for using the
       tagged nucleotides in sequencing reactions and various assay. Also,
       phosphate and polyphosphate molecular fidelity altering agents are
       disclosed.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L2
     ANSWER 2 OF 2 USPATFULL on STN
AN
       2002:129750 USPATFULL
TI
       γ-phosphoester nucleoside triphosphates
IN
       Kao, C. Cheng, Bloomington, IN, United States
       Widlanski, Theodore, Bloomington, IN, United States
       Vassiliou, William, Bloomington, IN, United States
       Epp, Jeffrey, Indianapolis, IN, United States
PΑ
       Advanced Research and Technology Institute, Inc., Indianapolis, IN,
       United States (U.S. corporation)
PΙ
       US 6399335
                         B1 20020604
       US 1999-441108
ΑT
                               19991116 (9)
DТ
       Utility
FS
       GRANTED
EXNAM Primary Examiner: Riley, Jezia
LREP
       Osman, Richard Aron
CLMN
       Number of Claims: 23
ECL
       Exemplary Claim: 1
DRWN
       0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 785
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       The invention provides methods and compositions for polymerizing a
       particular nucleotide with a polymerase. In general, the method involves
       (a) forming a mixture of a polymerase and a nucleoside triphosphate
       (NTP) comprising \alpha, \beta and \gamma phosphates and a
       \gamma-phosphate phosphoester-linked functional group; and incubating
       the mixture under conditions wherein the polymerase catalyzes cleavage
       of the NTP between the \alpha and \beta phosphates, liberating a
       pyrophosphate comprising the functional group and polymerizing the
       resultant nucleoside monophosphate, i.e. incorporates the nucleoside
       monophosphate in a nascent polynucleotide. A variety of functional
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groups compatible with the polymerization reaction are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 12 2 kwic